REMARKS

The disclosure has been amended to substitute the U.S. spelling for the English spelling of pressurized. A substitute sheet for page 4 has been included.

A letter requesting changes to the drawing is enclosed herewith showing the reference character for actuator team.

The objections to the claims on the basis of informalities has been noted. Each one of the claims has been amended to conform with the correction required by the examiner. In addition, claim 4 has been rejected under 35USC112 as failing to provide in line 2 antecedent basis and a specification for a socket. It is believed that on page 7, line 10, the correct antecedent basis has been provided for socket. In view of the amendment to the claims and the reference on page 7 of the specification the rejection under 35USC112 is believed inappropriate and should be withdrawn.

The claims 1-5 have rejected under 35USC112 as being anticipated by Braddick. The examiner states the first rod end and the second rod end (68) are pivotally joined to one another to allow degree of relative pivotal motion. A careful review of Braddick reveals that elements 68 and 58 are simply threaded with respect to one another and have no such pivotal movement. Braddick uses a flexible joint at the actuator to accommodate the relative motion of the shaft (34) for the wastegate valve. As such, the patent to Braddick fails to show or teach a provision a pivotal connection between two links in the translation of movement from an actuator to the valve mechanism for a wastegate valve.

Accordingly, it is believed that the rejection of claims 1-5 under 35USC112 is inappropriate and should be withdrawn.

Claims 6-8 and method claim 10 have been rejected on the same basis. Again, it is believed that Braddick shows no such teaching for a spherical joint in the elements translating between the actuator and the valve mechanism for a wastegate. For the reasons cited above, it is believed that the rejection of these claims is inappropriate. Accordingly, withdrawal of the rejection on that basis is believed to be inappropriate.

The allowance of the substance of claim 9 is noted with thanks. This claim will be rewritten in independent form pending the discussion of the claims from which it depends.

The remaining references cited by the examiner have been reviewed and found not to show or teach applicant's inventive concepts.

In view of the amendment to the claims and the discussion above, reconsideration and allowance of this case is respectfully requested.

Gary M. Gron
Registration No. 24,293
CUMMINS ENGINE COMPANY, INC.
Mail Code: 60701
500 Jackson Street
Columbus, IN 47201-3005
(812) 377-3554

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IN THE DESCRIPTION

In the description please substitute the following for page 4, as originally filed:

a valve assembly, and an actuating rod according to any preceding claim one end of which is connected to the actuator and the other end of which is connected to the valve assembly, whereby the pneumatic actuator controls operation of the valve assembly via the actuator rod.

According to a second aspect of the present invention there is provided a method of assembling a pressure control assembly of a turbocharger, the turbocharger comprising a turbine housing and a compressor, the pressure control assembly comprising a valve assembly mounted within the turbine housing, a pneumatic actuator mounted to the turbocharger to receive pressurized~~pressurised~~ air from the compressor, an actuator rod extending from the pneumatic actuator, and a lever arm extending from the valve assembly and the turbine housing and linking the actuator rod to the valve assembly, wherein the actuator rod comprises a first elongate portion defining a first rod end and a second portion defining a second rod end, the first and second portions being pivotally joined to one another to allow a degree of relative pivotal potion between said two portions in at least one plane perpendicular to the axis of the elongate first portion, the method comprising:

assembling the valve assembly and lever arm on the turbine housing;

assembling the pneumatic actuator and actuator rod as a sub-assembly;

mounting the pneumatic actuator/actuating rod sub-assembly to the turbocharger; and securing the second portion of the actuator rod to the lever arm.

The actuator rod is preferably secured to the lever arm by welding or otherwise bonding.

Preferably prior to securing the actuator rod to the lever arm, the valve assembly is held in a closed position by appropriate clamping of the lever arm and said pneumatic actuator is pressurized~~pressurised~~ to a predetermined pressure, thereby to determine the minimum pressure at which said valve will in use begin to open.

IN THE CLAIMS

2. An ~~A~~apparatus as claimed in claim 1, wherein the pivotal joint between said first and second portions allows pivotal motion in at least two orthogonal planes perpendicular to the axis of said first elongate portion.

3. An ~~A~~apparatus as claimed in claim 2, wherein the pivotal joint is a spherical joint.

4. An ~~A~~apparatus as claimed in claim 3, wherein said spherical joint comprises a spherical formation defined by one of said first and second portions, and a socket defined by the other of said first and second portions to receive said spherical formation.

5. An ~~A~~apparatus as claimed in claim 4 further comprising a pneumatic actuator connected to said first rod end.

6. An ~~A~~apparatus as claimed in claim 5, wherein the pneumatic actuator comprises a spring loaded diaphragm housed within a pressure chamber, said diaphragm being attached to said first rod end.

7. An ~~A~~apparatus as claimed in claim 6 further comprising a valve assembly, end of said actuating rod being connected to said actuator and the other end being connected to said valve assembly, whereby the pneumatic actuator controls operation of the valve assembly via the actuator rod.

8. An ~~A~~apparatus as claimed in claim 7, wherein the valve assembly further comprises a lever arm extending from and connected to a valve , said second portion of the actuator rod being secured to said lever arm extending from the valve assembly by way of which the valve is operated.

9. An ~~A~~apparatus as claimed in claim 8, wherein said second portion of the actuator rod is welded to said lever arm.

11. The ~~A~~ method according to claim 10, wherein the actuator rod is secured to the lever arm by welding or otherwise bonding.

12. The ~~A~~ method according to claim 11, wherein prior to securing the actuator rod to the lever arm, the valve assembly is held in a closed position by appropriate clamping of the lever arm and said pneumatic actuator is pressurized to a predetermined pressure, thereby to determine the minimum pressure at which said valve will in use begin to open.